TCE NEWS
EIGHTteenth Edition
SEPTEMBER 2003
TARGETED CAPACITY EXPANSION

Letter from the Project Director

Dear Readers,

Change is in the air. This issue of *TCE News* marks the end of a cycle and is the last one that ACS/Birch & Davis will produce. Since 2000, we have had the pleasure of providing grantees with information on and related to substance abuse treatment, and with a forum to share their stories. In addition, we offered resources in the form of articles, research study summaries, data bytes, and conference information that grantees could use to enhance program delivery.

We have made numerous enhancements to the newsletter that improved readability and reader access. For example, the newsletter is now available on the TCE Web site and readers can access current and back issues. Our readership has nearly doubled from 400 readers to approximately 700 and includes grantees and their staff, and CSAT staff, as well as the CSAT Director. The high marks we received on the Satisfaction Survey CSAT conducted indicated that you considered the *TCE News* to be a valuable publication.

We thank all of you who contributed to the success of this publication over the past three years and who made it possible for us to publish the *TCE News* each quarter. Special thanks go to the program staff that shared their successes and challenges with our readers during this period. It took a great deal of courage to share your experiences with others. One contributor told us that he used his *TCE News* article to obtain additional funding. Another contributor stated that he used the newsletter to share project accomplishments with his colleagues.

We have had a number of writers, editors, and graphic artists over the years. I, along with our current editor William Crutchfield, would like to thank each person who made a contribution to the newsletter.

Again, on behalf of the newsletter staff, thank you for your support and we wish you the very best in all that you do.

Sincerely,

Donna D. Atkinson, PhD
Project Director
ACS/Birch & Davis

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Substance Abuse and Mental Health Services Administration

Substance Abuse and Mental Health Services Administration
Center for Substance Abuse Treatment

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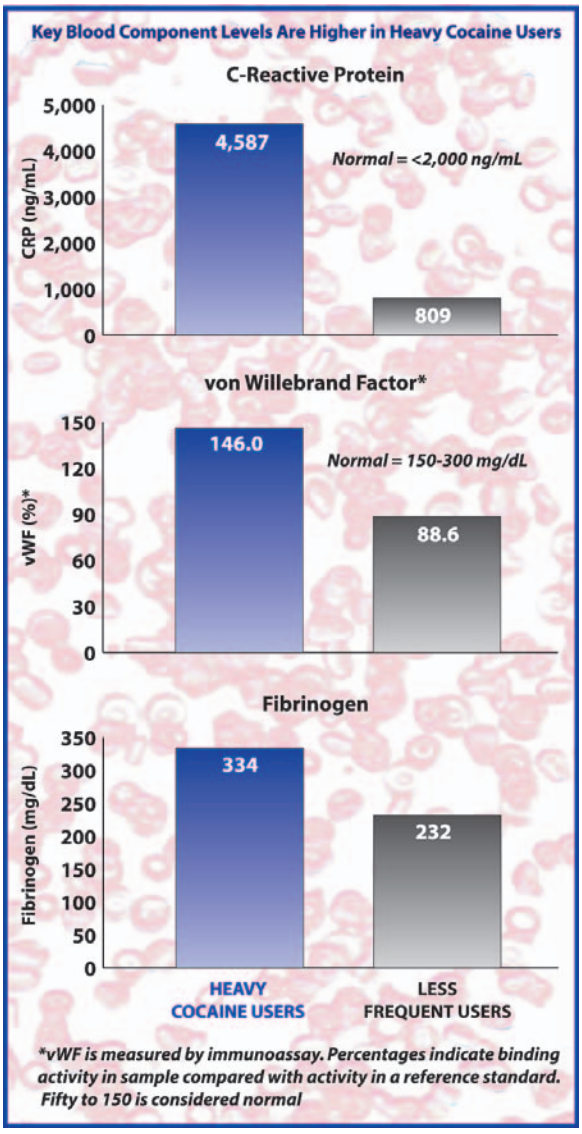
Cocaine's Effect on Blood Components May Be Linked to Heart Attack and Stroke

Cocaine use increases the risk of sudden heart attack and may also trigger stroke, even in users who otherwise are not at high risk for these sometimes-fatal cardiovascular events. The risk is related to narrowing of blood vessels and increases in blood pressure and heart rate. Recently, NIDA-supported researchers at the Alcohol and Drug Abuse Research Center at McLean Hospital in Belmont, Massachusetts, have identified changes in blood components that may also play a role in cocaine-related heart attack and stroke.



Dr. Arthur Siegel and his colleagues studied the effect of cocaine on blood factors that respond to inflammation by promoting clotting to initiate repair. They found that a component that promotes clotting--von Willebrand factor (vWF)--increases and remains elevated for hours after a single exposure to cocaine. They also found that, compared with less frequent users, heavy users of cocaine have elevated levels of vWF, fibrinogen (a clotting factor), and C-reactive protein (CRP), a blood protein that increases in concentration in response to inflammation and is a reliable indicator of risk for heart attack.

"These findings suggest that cocaine creates a temporary risk for heart attack or stroke by increasing clotting factors," Dr. Siegel explains. "Elevated CRP levels could indicate that long-term use of the drug is triggering inflammation in the cardiovascular system."

Participants in the study were 20 individuals (10 women and 10 men, average age 26 years) who used cocaine 2 to 6 times per month but were drug free at the time of the study. They received injections of low (0.2 mg/kg) or moderate (0.4 mg/kg) doses of cocaine or of saline solution, and their clotting-related blood components were measured every 30 minutes for 4 hours. In participants who received moderate doses of cocaine, but not those receiving low-dose cocaine or saline, levels of vWF increased by roughly 40 percent and remained elevated for 4 hours.

"With healthy subjects, it's not unusual to see a temporary increase in vWF after normal activity such as exercise," Dr. Siegel says. "But the increase is balanced by higher levels of factors that control clotting. The increases that followed cocaine administration were not accompanied by compensatory increases in protective factors."

The researchers also compared the blood factor levels of the original study participants to those of 10 other individuals (6 women, 4 men, average age 41 years) who used the drug far more heavily--6 to 20 times per week, on average--when both groups were drug free. The heavy cocaine users had higher levels of vWF, fibrinogen, and CRP.

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"Elevated levels of CRP and clotting factors that we see in the heavy users suggest that repeated use of cocaine poses an exposure-related and cumulative risk for heart attack or stroke," Dr. Siegel says. "The fact that neither group showed any compensatory increase in anticlotting mechanisms suggests that cocaine use upsets the body's ability to maintain a balance between risk and protective factors and tips the scale toward increased risk for heart attack or stroke."

The findings are preliminary, Dr. Siegel cautions, and based on a relatively small sample of cocaine users. "Other factors certainly play a role in CRP levels, and cocaine alone is probably not responsible for the elevated levels we found. For example, age is a factor but does not account for all of the difference. Smoking also may be a factor. In our study, cocaine users who smoked had higher CRP levels than those who did not. On the whole, these findings suggest that cocaine compounds the effects of other risk factors."

If larger studies confirm the relationship between elevated CRP levels and cumulative cocaine exposure, the blood component may serve as a marker for damage, Dr. Siegel says. Moreover, he adds, "measuring CRP is simple and inexpensive, and could be used as a test for the effects of cocaine in much the same way as blood composition is used to test for diabetes. It could serve as an objective measure of risk for heart attack and stroke and provide a way for patients and treatment providers to assess progress during drug treatment."

SOURCES:

Siegel, A.J., et al. Cocaine-induced erythrocytosis and increase in von Willebrand factor. Archives of Internal Medicine 159:1925-1930, 1999.

Siegel, A.J., et al. Effect of cocaine usage on C-reactive protein, von Willebrand factor, and fibrinogen. American Journal of Cardiology 89:1133-1135, 2002.

WHAT'S NEW!

Alcohol Impairs Cognitive Function Longer Than Expected

When alcohol is consumed, stimulation initially is prominent, while blood alcohol levels are rising during the "ascending limb" of the blood alcohol concentration (BAC) curve. During the "descending limb" of the BAC curve, when blood alcohol levels are falling, sedation becomes the prominent experience. In an important study, researchers have found that executive cognitive functioning (ECF) is more impaired during the descending limb of the blood alcohol concentration curve. Their findings suggest that alcohol's intoxicating effects last much longer than previously believed.

For more information, see "The Pharmacology of Alcohol" by Dr. John Woodward in American Society of Addiction Medicine's Principles of Addiction Medicine, Third Edition, 2003.

Drug Reduces Rewarding Effects of Alcohol

Mecamylamine, a drug that blocks the effects of nicotine in the brain, is believed to reduce the rewarding effects of cigarette smoking. In a new study, it also has reduced the self-reported stimulant and euphoric effects of alcohol, as well as subjects' desire to drink more.

Scientists have suspected for some time that the same mechanisms may be involved in both nicotine and alcohol reward, and prior research has suggested that mecamylamine blocks the reinforcing effects of alcohol in animals.

For more information, see "Pharmacologic Interventions for Alcoholism" by Dr. Henry Kranzler and Dr. Jerome Jaffe in American Society of Addiction Medicine's Principles of Addiction Medicine, Third Edition, 2003.

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Boston Sees Sharp Rise in Drug Deaths

An annual health report for the city of Boston (MA) shows a 76 percent increase in the number of deaths from heroin and other illegal drugs between 1998 and 2001.

Public health officials attribute the change to what they term "a flood" of cheaper and more potent heroin into New England. "We have a clear indication that we have a heroin epidemic in the state of Massachusetts, including Boston," said Deborah Klein Walker, assistant commissioner of the Massachusetts Department of Public Health. The report found an increase in the number of both women and white men who died of drug overdoses or drug-related suicides.

Health officials expect the trend to continue as budget cuts lead to the elimination of treatment programs. "We fear but expect that drug-related deaths will dramatically increase in 2003, and we're already seeing some indication of that," said John M. Auerbach, executive director of the Boston Public Health Commission.

SOURCE: *Boston Globe Online, July 25, 2003.*

Alcohol + Antiretroviral Therapy Accelerates HIV Progression

Alcohol consumption increases HIV disease progression in patients receiving antiretroviral therapy, recent research shows. Both alcohol abuse and HIV infection are believed to compromise immune function. A new study by researchers at Boston University School of Medicine evaluates the relationship between alcohol consumption and HIV disease progression among patients receiving highly active antiretroviral therapy (HAART does not refer specifically to any particular medication, but to a minimum of three antiretroviral medications that are known to work against HIV.)

For the study, researchers examined 349 HIV-infected individuals (276 men and 73 women) who had a history of alcohol problems. Subjects' HAART use during the preceding month was determined, as was their alcohol consumption, and then quantified as "none," "moderate," or "at risk." In addition, two markers of HIV disease progression were assessed: CD4 cell counts and HIV ribonucleic acid (RNA) levels.

SOURCE: *Addiction Technology Transfer Center National Office. Based on Samet JH, Horton NJ, Traphagen ET et al. (May 2003). Alcohol consumption and HIV disease progression: Are they related? Alcoholism: Clinical & Experimental Research 27(5), 862-868.*

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Conference Calendar Corner

OCTOBER 2003

October 5-6, 2003 – Santa Barbara, California
805-898-2932
The Evaluator as Agent of Organizational Change
Fielding Graduate Institute
Debra Arviso
http://www.fielding.edu/hod/eodcert/series.htm

October 7, 2003 – Kalamazoo, Michigan
269- 387-5895
Monitoring and Evaluation for Cost-Effectiveness in Development
Management
The Evaluation Café
Lori Wingate
http://www.wmich.edu/evalctr/evalcafe/

October 15-18, 2003 – East Lansing, Michigan
517-334-8050
Enhancing Evaluations to Effect Change
National Legislative Program Evaluation Society
http://www.state.mi.us/audgen/NLPES/Index.html

October 19-22, 2003 – Raleigh, North Carolina
703-836-8272
Partnerships for Building Safer Communities: Candid Conversations, Effective Responses10th National Conference on Drugs and Crime
National Treatment Accountability for Safer Communities
http://www.nationaltasc.org

October 20-22, 2003 – New Orleans, Louisiana
515-244-7181
Implementing Effective Services for Persons with Co-Occurring Disorders: Strategies, Models, and Tools
Southern Regional Conference on Mental Health Statistics
Deb Westvold
http://www.mhsip.org

October 30-November 1, 2003 – Washington, DC
301-656-3920
State of the Art in Addiction Medicine
American Society of Addiction Medicine
http://www.asam.org

NOVEMBER 2003

November 2, 2003 – Washington, DC
301-656-3920
Buprenorphine and Office-Based Treatment of Opioid Dependence
American Society of Addiction Medicine
http://www.asam.org

November 2, 2003 – Washington, DC
301-656-3920
Pain and Addiction: Common Threads IV
American Society of Addiction Medicine
http://www.asam.org

November 3-4, 2003 – Washington, DC
301-656-3920
1st Annual Addiction Day on Capitol Hill
American Society of Addiction Medicine
Celso Puente
cpuen@asam.org

November 5-8, 2003 – Reno, Nevada
888-232-2275
Evaluation 2003; 18th Annual Conference
American Evaluation Association
Susan Kistler
http://www.eval.org

November 7-9, 2003 – Albuquerque, New Mexico
800-248-1946
11th National Quality Education Conference – Doorways to Performance Excellence: Standards, Assessment, and Accountability
http://nqec.asq.org/index.html

November 18, 2003 – Bethesda, Maryland
301-443-3860
"Alcohol-induced Insult to the Living Brain: Views from Magnetic Resonance Imaging"
Mark Keller Honorary Lecture sponsored by SAMHSA
Nancy Collaway
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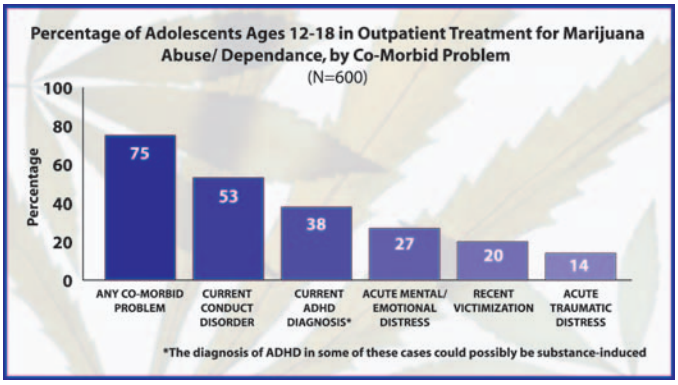
DATA BYTES

Three-Fourths of Adolescents Being Treated for Marijuana Abuse or Dependence Also Have Other Psychological Problems

Three-fourths of adolescents receiving outpatient treatment for marijuana abuse/dependence also had at least one co-morbid psychological problem, according to findings from the Cannabis Youth Treatment Study.[1] Just over one-half (53 percent) of the youths were diagnosed with conduct disorders and 38 percent with attention deficit hyperactivity disorder (ADHD).* Other problems reported included distress over mental health, recent victimization, and experiencing acute traumatic distress. According to the authors, "For most adolescent treatment clients the problem is not just drugs. The associated psychological problems and the hazards identified . . . point to the need to address a range of issues in treatment, including co-morbidity, coping and social involvement." (p.56)



[1]The Cannabis Youth Treatment Study was a randomized clinical trial of outpatient treatment clinics in four metropolitan areas of the United States.

SOURCE: *CESAR FAX, Volume 12, Issue 35, September 1, 2003*

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